IMF STAFF DISCUSSION NOTE

September 2016 SDN/16/08

The Economic Impact of Conflicts and the Refugee Crisis in the Middle East and North Africa

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Authorized for distribution by Masood Ahmed

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JEL Classification Numbers: E6, H56, J11, I3, F5

Keywords: Middle East and North Africa, conflicts, refugees, macroeconomic policy, economic spillovers, post-conflict reconstruction, international community

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CONTENTS

Abbreviations

EDA	Emerging and developing Asia
EDE	Emerging and developing Europe
EM	Emerging markets
FDI	Foreign direct investment
GCC	Gulf Cooperation Council
GDP	Gross domestic product
GMM	Generalized method of moments
IMF	International Monetary Fund
ISIL	Islamic State of Iraq and the Levant
LAC	Latin America and Caribbean region
LIC	Low-income country
LSDV	Least-squares dummy variable
OLS	Ordinary least squares
MENA	Middle East and North Africa region
SSA	Sub-Saharan Africa
UN	United Nations
UNHCR	United Nations High Commissioner on Refugees

Country Abbreviations

AFG	Afghanistan	MRT	Mauritania
BHR	Bahrain	OMN	Oman
DJI	Djibouti	QAT	Qatar
DZA	Algeria	PAK	Pakistan
EGY	Egypt	SAU	Saudi Arabia
IRQ	Iraq	SDN	Sudan
IRN	Iran	SOM	Somalia
JOR	Jordan	SYR	Syria
KWT	Kuwait	TUN	Tunisia
LBN	Lebanon	UAE	United Arab Emirates
LBY	Libya	YMN	Yemen
MAR	Morocco	WBG	West Bank and Gaza

EXECUTIVE SUMMARY

Large-scale conflicts are a major challenge for the Middle East and North Africa (MENA). Since about the middle of the last century, the region has experienced more frequent and severe conflicts than any other part of the world, exacting a devastating human toll. Yet, as conflicts intensify and spread, the region now faces unprecedented challenges. Violent, non-state groups such as the Islamic State of Iraq and the Levant have emerged as significant political and military actors, holding large areas of territory. And a refugee crisis bigger than any since World War II is affecting the MENA region, Europe, and beyond, straining economies and social systems. Given the significant political polarization, economic inequality, and rapid population growth in the region, these conflicts are unlikely to dissipate anytime soon.

Intense conflicts and human displacement have had massive and persistent economic costs. Conflicts in countries such as Iraq, Libya, Syria, and Yemen, in addition to tragic loss of life and physical destruction, have caused deep recessions, driven up inflation, worsened fiscal and financial positions, and damaged institutions. In addition, the harmful effects of the turmoil have spilled over into neighboring countries such as Lebanon, Jordan, Tunisia, and Turkey, into the broader Middle East and North Africa, and even other regions, notably Europe. To varying degrees, these countries face large numbers of refugees, weak confidence and security, and declining social cohesion that undermines the quality of institutions and their ability to undertake much-needed economic reforms.

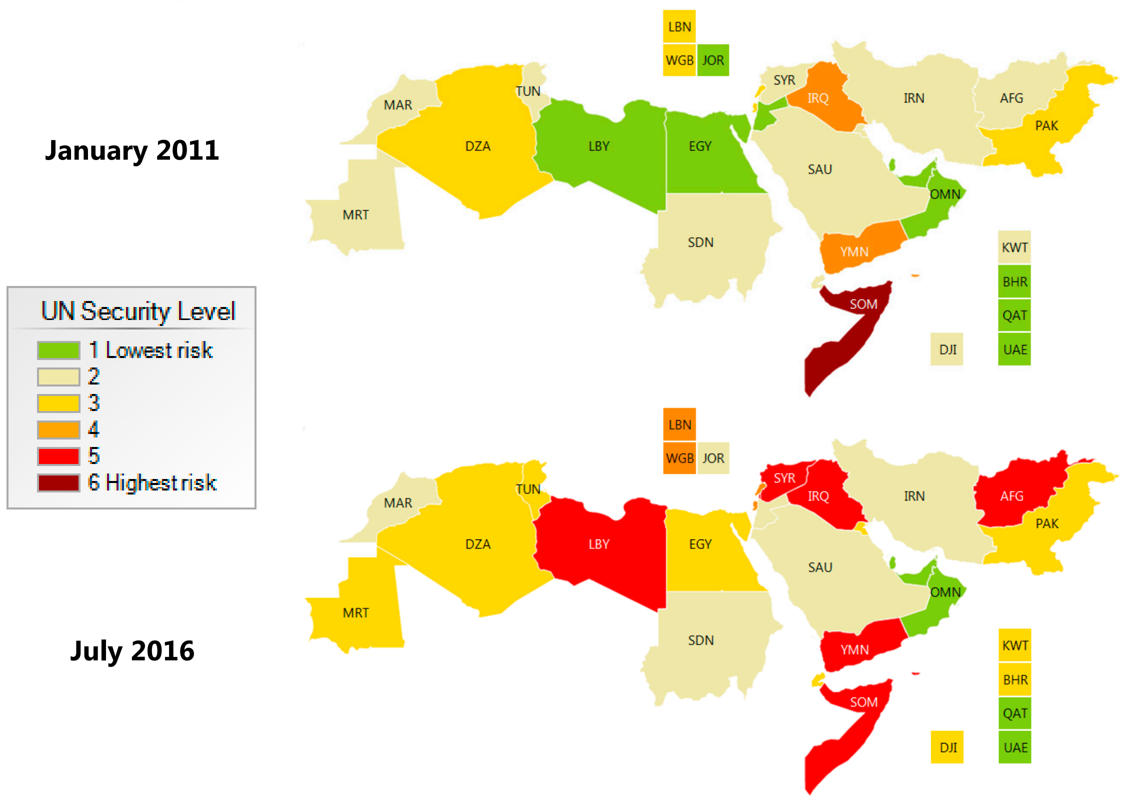
How can economic policies mitigate the economic costs of conflicts and large refugee flows? Recent MENA experience suggests that effective policy focuses on protecting economic institutions, prioritizing budget space to serve basic public needs, and using monetary and exchange rate policies to shore up confidence. But such policies are often difficult to implement, requiring unconventional measures. In Libya and Yemen, for example, central banks have gone to extraordinary lengths to support their economies. Once conflicts subside, successful rebuilding requires well-functioning institutions and robust yet flexible macroeconomic frameworks to absorb capital inflows and maintain debt sustainability. Countries hosting refugees must make difficult decisions about access to labor markets and social programs, as well as measures for their own nationals who often struggle with poverty and unemployment. To help prevent future violence, countries across the region should accelerate inclusive growth reforms aimed at reducing inequality.

External partners, including the IMF, have supported countries' efforts to contain the fallout. The top priority has been to scale-up humanitarian aid to meet the immediate needs of the people affected, both in conflict zones and in countries hosting large numbers of refugees, such as Jordan and Lebanon. The second priority is on developmental aid to help rebuild infrastructure, and, more broadly, strengthen economic and social resilience across the MENA region. Efforts to organize a wider and deeper international response recently intensified and have focused on mobilizing additional financing. As much as possible, this additional funding should take the form of grants and concessional loans to avoid overburdening countries unable to sustain the extra debt. The IMF supports these efforts, including with policy advice, sizable financing, and capacity building.

INTRODUCTION

1. **Conflicts are proliferating in the Middle East and North Africa (MENA).**[2] Almost daily, global media report intense violence, large-scale human suffering, and destruction in Afghanistan, Iraq, Libya, Somalia, Syria, and Yemen. These conflicts have fundamentally changed the region's physical, economic, and social landscape, which, at the onset of the Arab Spring just over five years ago, looked much more hopeful (Figure 1). Two distinctive features of the wave of conflicts are the importance of non-state actors such as the Islamic State of Iraq and the Levant (ISIL), who wield increasing power in and beyond the region; and a large-scale refugee crisis, mainly as Syrians flee civil war. Moreover, there is every reason to believe that the MENA conflicts will persist for some time. Their root causes in social and political polarization fueled by strong population growth, economic inequality, and ideological and religious schisms, are deeply entrenched.

Figure 1. UN Security Level by Country, January 2011 and July 2016



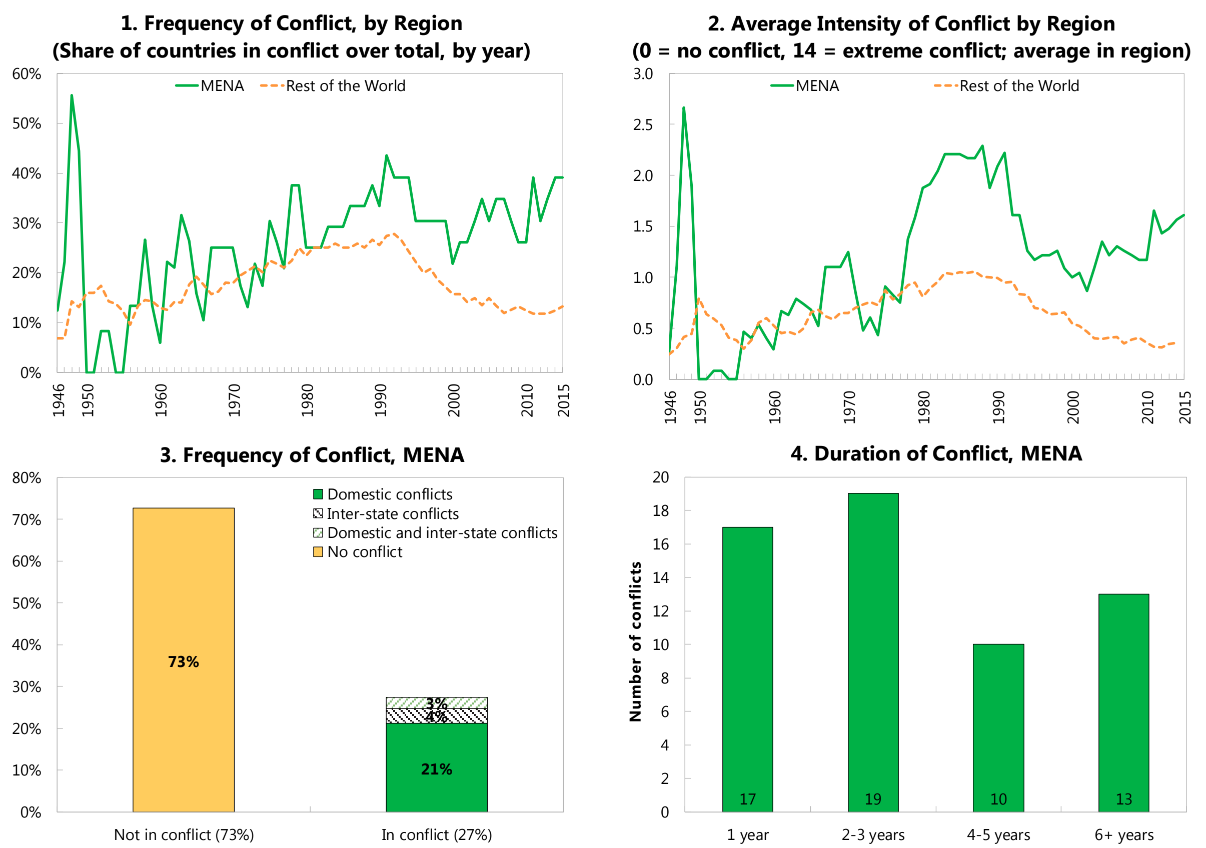
Source: IMF Security Services.
Note: Country borders do not necessarily reflect the IMF's official position.

2. **This new wave of conflicts is just the latest in a region long marked by violence.** Figure 2 illustrates the MENA region's unique exposure to conflict in the world. Indeed, conflicts have affected its countries, on average, for over one-quarter of the period since the end of World War II, yet only one-fifth of that time in the rest of the world. In addition, the region's spells of conflict have been more intense and have tended to become deeply entrenched, making them especially difficult

[2] For this paper, the MENA region includes the Middle East, North Africa, Afghanistan, and Pakistan.

to overcome. From 1946–2015, 12 out of 59 conflict episodes in MENA lasted more than eight years, and in about half of these episodes the ensuing peace lasted less than 10 years. As a result, the region accounts for 40 percent of the estimated global total of battle-related deaths since 1946, according to the Uppsala Conflict Data Program, and for about 60 percent of all casualties since the turn of the millennium.

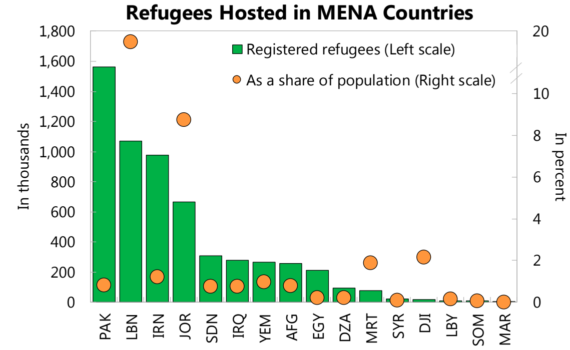
Figure 2. Conflicts in MENA and the Rest of the World, 1946–2015



Sources: Center for Systemic Peace; IMF staff calculations.
Note: Frequency is the share of country-years in conflict or no conflict over the total number of country-years in the sample. Duration is the number of conflicts by length. For this chart, uninterrupted spells of country-years in conflict for a given country are considered one continuous event.

3. The economic costs of the recent conflicts and the refugee crisis are massive. Indeed, the economic fallout is no less damaging than the humanitarian costs for the stability of the region and its longer-term development potential. Furthermore, the economic costs are not confined to countries directly affected by conflict. An estimated 10 million refugees originating from the region and registered by the United Nations High Commissioner for Refugees (UNHCR) have stayed

Refugees Hosted in MENA Countries



Sources: UNHCR Statistics Database; IMF staff calculations.
Note: These are the 16 MENA countries with the most registered refugees. Estimates of inhabitants (including refugees) are from the UN Population Division.

mostly in the neighborhood. Since 2010, for example, refugees from Syria and Iraq have increased the populations of Lebanon by one-quarter and Jordan by one-tenth, putting major pressure on budgets, public infrastructure, and labor and housing markets.[3] Impacts also include trade disruptions, while declining investor and consumer confidence have hurt the entire MENA region. These would be major macroeconomic problems anywhere, but they are especially acute for a region beset for a long time by severe structural deficiencies, lack of investment (IMF 2016a), and, more recently, the substantial impact of falling oil prices on the oil-producing economies.[4]

4. **Recently, conflict costs have spilled beyond MENA**. As discussed in IMF 2016b, a stream of more than 1.7 million refugees has reached Europe since July 2014, while 3 million refugees are putting economic pressure on Turkey. These large-scale migrations, as well as attacks linked to groups harbored in MENA, are already undermining important achievements in the European project, such as the free movement of people across national borders, and are contributing to a growing sense of insecurity.

5. **This paper reviews the costs and discusses policy challenges of recent MENA conflicts.** Section II looks at the economic impact of recent MENA conflicts and the channels through which they have exacted their often devastating costs. In doing so, it differentiates between countries in conflict and the neighboring countries it affects (henceforth spillover countries).[5] Section III focuses on policy challenges, based on experience with conflicts and state fragility across MENA. It distinguishes between policy issues for countries where conflicts are ongoing and those moving toward post-conflict reconstruction and development, albeit amid substantial fragility. It also makes the broader point that policymakers across MENA can help avoid future violence by fostering higher and more inclusive growth to address the root causes of conflict. Section IV concludes by highlighting the role of external partners, including the IMF, in assisting MENA conflict countries and their neighbors.

6. **Amid this wave of conflicts, the paper calls for scaling up external financial support**. This support should include both *humanitarian aid* aimed at addressing the immediate needs of populations affected by conflict, especially refugees and the internally displaced, as well as greater *development assistance* to the broader MENA region, underpinned by effective frameworks for cooperation between donors and recipient countries. Success in raising and efficiently using financing will depend on the commitment of donors to improve aid delivery and recipient countries to address structural deficiencies through policy reforms that foster growth and inclusiveness.

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[3] According to UNHCR, registered refugees from MENA countries represented 65 percent of the global count in 2015, up from 30 percent in the early 1990s. And some government estimates suggest that the actual number of refugees exceeds UNHCR numbers. For example, while about 650,000 Syrian refugees are registered with UNHCR in Jordan, the authorities estimate an actual number closer to 1.3 million.

[4] Oil producing countries include countries of the Gulf Cooperation Council, Algeria, Iraq, Iran, and Libya.

[5] The fact that conflicts have different degrees of intensity complicates strict categorization of countries as "in-conflict" or not. This paper focuses on recent large-scale conflicts in MENA. For quantitative analysis, it uses the database on "Major Episodes of Political Violence" from the Center for Systemic Peace.

THE ECONOMICS OF MENA CONFLICTS

A. Macroeconomic Impact of Conflicts and the Refugee Crisis

7. **MENA's recent conflicts have slashed economic growth.** GDP in Syria in 2015, after four years of fighting, accounted for less than half of its pre-conflict level in 2010. Yemen lost an estimated 25–35 percent of its GDP in 2015 alone, while in Libya—where dependence on oil has made GDP growth extremely volatile—GDP fell by 24 percent in 2014 as violence picked up. West Bank and Gaza offers a longer-term perspective on what can happen to growth in a fragile situation. The World Bank found that the West Bank and Gaza economy was virtually stagnant over the past 20 years, contrasting with nearly 250 percent average growth in other MENA countries in that period (World Bank 2015a). The strength of these GDP contractions in the presence of conflict is remarkable, given that the literature is more nuanced. Studies tend to conclude that the impact of conflict typically varies significantly with the type, intensity, duration, and geographical scope of the violence (Leeson 2007; Powell, Ford, and Nowrasteh 2008).

8. **Furthermore, these conflicts have led to high inflation and exchange rate pressures.** In Iraq and Afghanistan, inflation peaked at more than 30 percent during the mid-2000s, and in Yemen and Libya at more than 15 percent in 2011, on the back of a collapse in the supply of critical goods and services, combined with a strong recourse to monetary financing of the budget. Syria is an even more extreme case, where consumer prices rose by more than 300 percent between March 2011 and May 2015. Such inflation dynamics are usually accompanied by strong depreciation pressures on local currencies, which the authorities may try to resist by heavy intervention and regulation of cross-border flows. For example, the Syrian pound, which was allowed to float in 2013, officially trades at one-tenth of its pre-war value against the U.S. dollar.

9. **Conflicts in MENA countries also had economic impact on neighbors.** In Jordan, the conflicts in neighboring Syria and Iraq slowed down economic growth by about 1 percentage point in 2013. Meanwhile, despite the slowdown in growth, core inflation accelerated in 2014 to 4.6 percent, from 3.4 percent in 2013, initially mostly driven by rents, partly reflecting additional demand from the country's large refugee population and a limited short-term supply response. This can be seen especially in the case of the Mafraq governorate bordering Syria: rents increased by 68 percent between 2012 and 2014, compared to 6 percent in Amman (IMF 2014). Similar dynamics were at work in Lebanon, where GDP growth slowed to 2.8 percent in 2012 and 2.5 percent in 2013 from an average of 9 percent in 2007–10. Prices of food and rent also increased considerably at the beginning of the crisis in some areas.

10. New quantitative analysis complements previous case studies and anecdotal evidence. The analysis carried out for this paper, using a large panel of 179 countries with annual data for 1970–2014, shows that:[6]

- **The impacts of conflicts on growth and inflation are large.** Regression analysis suggests that conflicts are associated with a reduction in GDP growth of 2 percentage points per year on average in all countries, and 1.5 percentage points in MENA countries. Moreover, a vector autoregression analysis simulating the impact of a conflict shock[7] finds the impact over time for MENA countries to be particularly pronounced: GDP contracts by as much as 4 percentage points in the first year, compared with 2 percentage points or less for other emerging market economies and low-income countries. Inflation accelerates during years of conflict: on average, the consumer price index increases by 1.6 percentage points (2.3 percentage points in MENA). These findings are broadly consistent with the literature.[8] That said, it is important to note that these averages mask the large heterogeneity of conflict situations, including in the MENA region.

- **Conflict duration and intensity are important determinants of economic impact**. Accounting for the duration of each conflict reveals that the adverse effects increase with the length of exposure to violence (Figure 3). After three years of conflict, MENA countries, on average, suffered GDP losses of between 6 and 15 percentage points (compared with 4 to 9 percentage points worldwide), while the cumulative effect on inflation rises to 4 to 6 percentage points (compared with 5 to 8 percentage points worldwide). Moreover, the effects on GDP and inflation for more intense conflicts are many times stronger than for the average of all conflict types.

- **Conflict impacts spill over to neighbors.** Countries bordering a high-intensity conflict zone recorded an average annual GDP decline of 1.4 percentage points.[9] This effect was even more pronounced in the MENA region, where the average decline was on the order of 1.9 percentage points.[10] Moreover, conflicts are associated with accelerated inflation in neighboring countries (by an average of 1.7 percentage points worldwide, and 2.8 percentage points in MENA).

[6] See Annex 1 for details.

[7] The shock corresponds to a one standard deviation increase in the intensity of conflict.

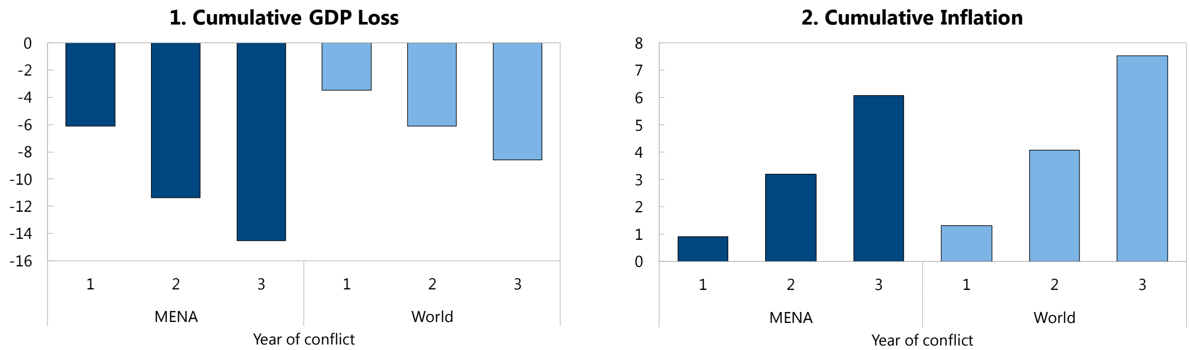
[8] Collier (1999); Blomberg, Hess, and Orphanides (2004); Chen, Loayza, and Reynal-Querol (2008); Cerra and Saxena (2008); Bove, Elia and Smith (2016).

[9] GDP and inflation impacts are significant when conflicts in neighboring countries are particularly severe (according to our definition, this can happen either when the country under analysis has a neighbor experiencing a particularly severe conflict or when it is surrounded by multiple conflicts (see Annex, footnote 40). For low-intensity conflict zones, the estimated impacts were not significant.

[10] This may reflect the close ethnic, cultural, religious, and ideological ties among MENA countries, many of which either emerged out of the Ottoman Empire or were influenced by it (see Cammett and others 2015).

Figure 3. Cumulative Changes in GDP and Inflation by Years of Conflict

(*Percentage points of GDP loss and inflation due to conflict*)



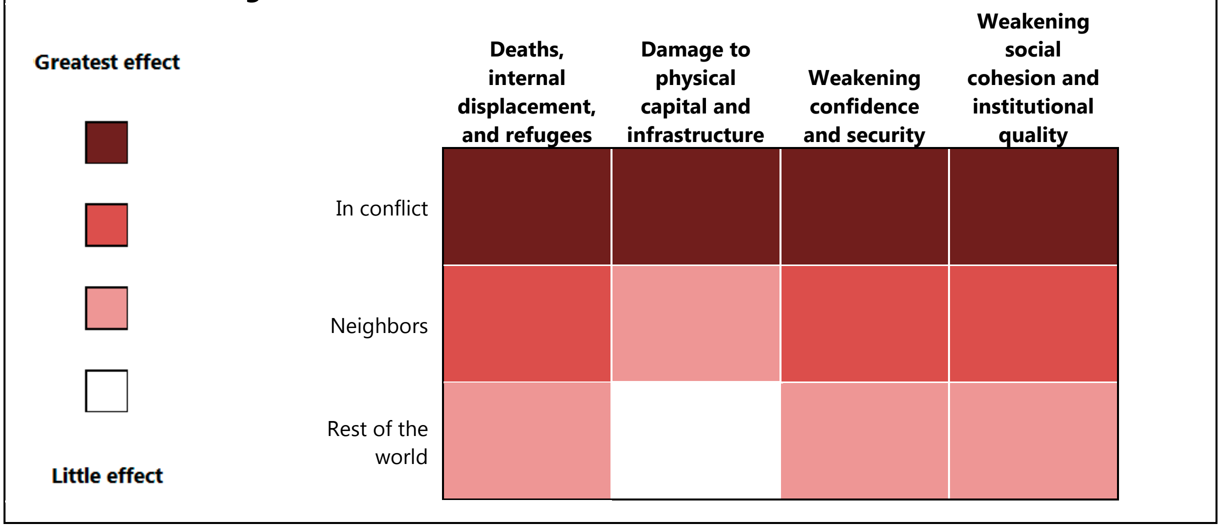
Sources: Center for Systemic Peace; IMF World Economic Outlook; IMF staff estimates.
Note: Staff estimates of GDP loss and inflation changes due to conflict account for country fixed effects and conflict intensity. The sample period is 1970–2014.

B. Main Channels of Economic Impact

11. Conflicts and large-scale refugee crises affect economies through multiple channels. In line with the neoclassical growth model, conflicts, as well as the human displacement they entail, hurt actual and potential growth. This is due to their impact on an economy's endowment of physical and human capital, as well as its total factor productivity, that is, an economy's capacity to produce output for given amounts of labor and capital (Figure 4).[11] Many factors affect total factor productivity, but evidence from recent MENA conflicts suggests that two are particularly important: first, worsened confidence arising from weaker security, both in terms of objective conditions and, equally important, subjective perceptions; and second, eroding social cohesion and institutional quality that together complicate economic policymaking. Naturally, the strongest impact of the four channels is in areas directly exposed to elevated conflict. But they also affect neighboring states and, especially through the channels of confidence and social cohesion, even countries far removed from the epicenters of violence. The rest of this section details the nature of these four stylized channels and how they have been playing out together in recent MENA conflicts, producing their strong impact on the macroeconomic aggregates discussed above.

[11] There is significant literature on the various impacts of conflicts. See Blattman and Miguel (2010) for an overview.

Figure 4. MENA Conflicts: Economic Transmission Channels



Deaths, internal displacement, and refugees

12. **Falling populations and displacement reduce human capital in conflict countries.** Large death tolls, internal displacement, and refugees fleeing to other countries reduce a home country's labor force.[12] The numbers are staggering: as of June 2016, for example, an estimated 470,000 Syrians had been killed since the war started in 2010, 6.6 million had become internally displaced, and more than 5 million had fled to other, mostly neighboring countries.[13] Together, these numbers account for about 55 percent of the country's 2010 population. The picture is only slightly less dramatic in Iraq and Yemen: 4.4 million people have been internally displaced in the former, and 2.5 million people in the latter (Figure 5). A large proportion of refugees are skilled workers, representing a significant brain drain from conflict countries.

13. **Conflicts also reduce human capital by spreading poverty.** Poverty in populations in conflict countries, even if situated outside regions directly affected by violence, tends to rise as job opportunities decline. Education and health services also deteriorate. The strength of this effect increases with the duration of each conflict.[14] Again, Syria provides a dramatic example. Unemployment jumped from 8.4 percent in 2010 to more than 50 percent in 2013, school dropout rates reached 52 percent (Sab and Hegazy 2014), and life expectancy—a proxy for the quality of health services—fell from 76 years before the conflict to 56 years in 2014. While no reliable statistics are available, the situation has only deteriorated since then. In Yemen, which already struggled with a poverty rate above 50 percent prior to the escalation of the conflict in late 2014, the UN estimates that 80 percent of the population is in need of humanitarian assistance. In Iraq, poverty is estimated to have risen to 23 percent in 2014, from 19.8 percent in 2012.

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[12] More generally, there are negative consequences to emigration for sending countries (IMF 2016c).

[13] Syrian Centre for Policy Research (2016) for the death toll, UNHCR for internally displaced people and refugees.

[14] See Ghobarah, Huth, and Russett (2003); Akresh, Bundervoet, and Verwimp (2009); Camacho (2009); Akresh, Bhalotra, Leone, and Osili (2012) for effects on health, and Ichino and Winter-Ebmer (2004); Blattman and Annan (2010); and León (2012) for the effects on education.

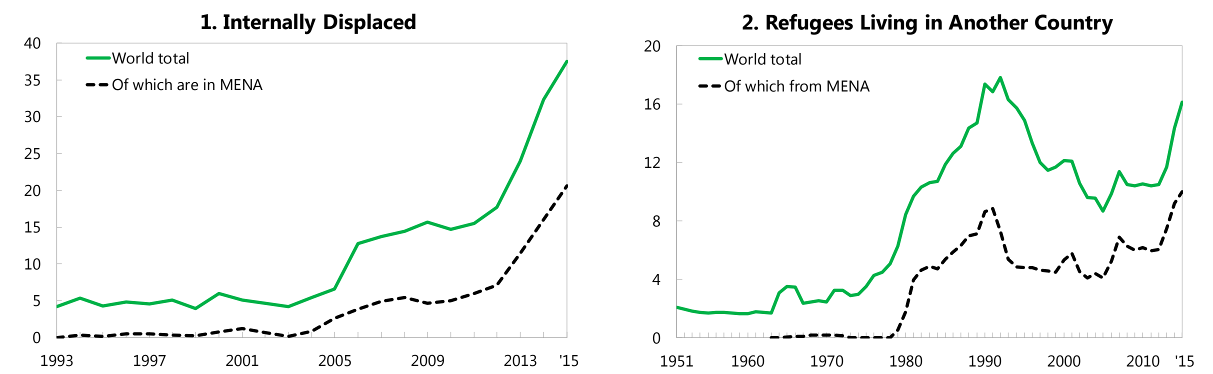
14. Large refugee populations also have major economic impacts in MENA host countries.

- **Impact on refugees.** The majority of those who have fled the violence are in a dramatically worse situation than prior to their displacement, often having brought few possessions with them and finding themselves in extreme dependency. This is often due to restrictions on their movements, limited access to work permits and to social infrastructure, and low schooling—with negative consequences for long-term employability and productivity. For example, in Jordan, only 6,000 Syrian refugees worked legally in 2014, compared with an estimated 160,000 in the informal economy (Verme and others 2016). In addition, education levels are low: 60 percent of Jordan's Syrian refugees above the age of 15 had not completed basic schooling, and only about 15 percent had completed secondary education, compared with 42 percent of Jordanians (Stave and Hillesund 2015). Only about one-half of Syrian refugee children in Jordan attend school despite having access to free education (Verme and others 2016).

- **Impact on host communities**. The impact of the refugee surge on host communities in MENA has also been economically significant, in contrast to the European experience. Evidence from Lebanon suggests that sizable informal employment among refugees, combined with depressed economic activity, caused a drop in both wage levels and the labor force participation of locals, particularly women and young people. The World Bank estimates that the Syrian crisis pushed an additional 170,000 people into poverty, and those who were already poor are now in deeper poverty (World Bank 2015c).[15] Moreover, sizable refugee populations tend to increase pressure on already stretched public services vital for the development of human capital. For example, while Lebanon succeeded in accommodating about half of its Syrian refugee children in the country's public education system, this has come at the expense of an increase in classroom sizes that—combined with inadequate teacher training—has reduced overall education quality. Similar trends are reported in the country's health care sector (World Bank 2015c).

Figure 5. Displaced Persons

(Millions)



Sources: UNHCR; IMF staff calculations.
Note: Refugee figures only include those registered with UNHCR.
Data do not include Palestinian refugees in Jordan, Lebanon, Syria, and West Bank and Gaza who are registered with the United Nations Relief and Work Agency for Palestine Refugees in the Near East.

[15] Over the short to medium term, some individuals in host communities may benefit from the influx of refugees, while others are hurt (Ruiz and Vargas-Silva 2013).

Damage to physical capital and infrastructure

15. Conflicts damage physical capital and infrastructure, harming production and trade. Destruction of production plants, public infrastructure, and commercial buildings is the most visible channel through which conflicts hamper economic activity (Collier 1999). In spells of intense conflict, the economic losses can be staggering. The Syrian Centre for Policy Research (2016), for example, estimates the cost of lost physical capital in Syria at $137.8 billion (or 230 percent of pre-war GDP), due to either the partial or full destruction of existing capital, idle capital stock, and lost investment. Similarly, based on media reports, IMF staff estimated that infrastructure losses in Yemen since the intensification of the fighting in early 2015 currently exceed $20 billion (or 50 percent of pre-war GDP). Destruction of this magnitude has a significant impact on production capacity and trade.[16] A case in point is Libya, where oil output dropped to about one-quarter of capacity because of the closure of pipelines and oil facilities, as well as blockades of oil ports; as a result, the external current account fell into a deficit of 44 percent of GDP in 2015, from a surplus of 13.5 percent in 2013. In Yemen, oil production came to a complete stop after March 2015.

16. Neighboring countries are not insulated from such economic damage. Destruction of physical capital and infrastructure in conflict countries can undermine production and trade in neighboring countries. In Jordan since the beginning of the Syrian crisis and the worsening of the conflict in Iraq (its main export market), for example, trade has been affected by disruption in transportation corridors that has not only hampered bilateral activity, but also Jordanian exports to Turkey and Europe. Lebanon has faced similar challenges, but, at the aggregate level, trade in goods has not been affected (World Bank 2015b). Moreover, the massive and rapid influx of refugees from Syria has strained already weak infrastructure, since the majority of refugees live within local communities.[17] The increase in population as refugees flowed in was equivalent to the previously projected population growth over 20 years.

Weakening confidence and security

17. Heightened insecurity tends quickly to reduce confidence. As the MENA conflicts have provided violent non-state actors like ISIL with the geographical space to establish themselves as a significant political and military force, heightened insecurity has spread well beyond the areas of conflict. Destabilizing high-profile attacks by such actors on economically important targets have not only occurred in Iraq and Syria, but also in Egypt and Tunisia, far removed from the epicenter of the fighting. Regular crime has also been on the rise as many governments have struggled to exert authority over their respective territories and borders. In Libya, for example, the UN recently reported widespread violations of human rights (Human Rights Council 2016). Human traffickers have taken advantage of the country's weakened security by using it as a platform through which to

[16] Martin, Mayer, and Thoenig (2008) find that severe civil wars can decrease external trade by up to 40 percent.

[17] Overall in the region, 10 percent of refugees live in camps. Discrepancies across countries are large. In Algeria, Djibouti, and, to a lesser extent, Mauritania and Sudan, the great majority of refugees live in camps, while in Egypt, Lebanon, Libya, Morocco, and Tunisia, there are no official refugee camps.

smuggle migrants from Africa into southern Europe, often with fatal consequences. Weakening confidence often creates economic effects through four channels:

- **Declining investment.** Cross-country data from the MENA region suggest a strongly positive correlation between foreign investment and political stability (Figure 6). For example, foreign direct investment (FDI) into Syria came to a complete stop after the outbreak of war (Sab and Hegazy 2014). More generally, the recent wave of conflicts has added to the persistent challenge across the MENA region of bringing much-needed FDI inflows back to levels existing before the start of the popular uprisings in 2011 (Morocco and Egypt being two notable exceptions).[18]

- **Deteriorating financial sector performance.** By increasing investor risk, conflict often sparks deposit runs, asset market crashes, and capital flight. And worsening financing conditions, declining economic activity, plummeting collateral values, and deteriorating security jeopardize banks' ability to sustain financial intermediation and payment systems. In Syria, bank assets and deposits contracted steeply and rapidly after the onset of the conflict, and the share of nonperforming loans rose to an estimated 35 percent by the end of 2013, from less than 5 percent in 2010 (Sab and Hegazy 2014). More broadly, recent research (Herrala and Turk Ariss 2016) suggests that financial systems in MENA countries play a significant role in the transmission of political instability on economic growth. Instability has a strongly negative influence on credit availability and, therefore, investment. Moreover, what flows remain tend to favor firms with political connections.

- **Higher security spending.** Military spending rose in the MENA region over the period 2011–14, increasing pressure on fiscal accounts, in sharp contrast to the global downward trend in such spending over the same period. The private sector has also been affected: firms continuously report increasing outlays for security-related activities, which cannot be used for more productive purposes such as research and development (Figure 6).

- **Shrinking tourism.** Tourism sectors in Syria and other conflict countries have collapsed as a result of the fighting. Moreover, the intensifying and spreading violence has rippled into tourism receipts throughout the MENA region, affecting countries such as Egypt, Jordan, Lebanon, and Tunisia that have traditionally relied on tourism as a major source of foreign exchange income (Figure 6). Tunisia may be the most dramatic case in this regard: following the attacks on the Bardo Museum and in Sousse, tourism receipts dropped by 3.5 percent of GDP in 2015, compared with 2014; and the sector remains under pressure in 2016.

Weakening social cohesion and institutional quality

18. Social cohesion has weakened across the region. Conflicts deepen social and economic divisions, which tend to crystallize around differences in income, ethnicity, political orientation, or

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[18] Evidence suggests that, combined with trade openness, financial market development and commitment to economic reforms and macroeconomic discipline, FDI and growth reinforce each other, especially because of FDI's importance for technology transfer and market access (Basu, Chakraborty, and Reagle 2003; Dabla-Norris and others 2010; Hansen and Rand 2006; Cipollina and others 2012).

language (see Easterly, Ritzen, and Woolcock 2006). These effects are observable in countries like Iraq, Syria, and Yemen, which fragmented into areas controlled by opposing factions that make the prospect of forming unified and broadly supported governments a distant prospect. Political systems in spillover countries also feel this headwind. For example, in Jordan, although approval ratings for the government remained remarkably high, opinion surveys registered considerable political dissent in areas with sizable refugee populations and high unemployment. Similar dynamics are at play in Egypt, Lebanon, and Tunisia. More broadly, opinion polls such as the World Values Survey show that trust, a key measure of social cohesion, has declined in several countries of the region, which hinders economic transactions and makes the political process more difficult.[19] For example, the share of respondents agreeing that "most people can be trusted" fell from 46 percent to 30 percent in Iraq, and from 27 percent to 13 percent in Jordan between 1999–2004 and 2009–14. This can help explain why governments in the Arab Countries in Transition[20] and elsewhere in the region have been slow in implementing economically important but politically difficult structural reform projects.

19. Large refugee populations have increased pressure on social cohesion. Experience shows that the initial open-door policies of countries like Jordan and Lebanon were modified as the number of refugees became larger. While refugees were initially welcomed among families and friends, massive inflows of Syrian refugees became a threat to the delicate societal and inter-communal balance, especially in Lebanon and Jordan. In the latter, a 2014 poll showed that nearly 80 percent of Jordanians were opposed to receiving more refugees. The security situation worsened in parallel, as evidenced in particular by increased violence toward women and girls (World Bank 2015c).

20. Institutional quality has declined in part because of weakening cohesion. Studies such as Easterly, Ritzen, and Woolcock (2006) found that declining cohesion contributes to worsened institutional quality and governance and, ultimately, lower growth.[21] This effect comes about as heightened societal tensions undermine key institutional functions important for economic performance, such as effective checks and balances on policymakers, and the enforcement of the rule of law (see IMF 2012; Olson 2000). Data on institutional quality for the MENA region suggest that such dynamics have unfolded in recent years; for example, competitiveness and governance indicators from the World Bank and the World Economic Forum show a sharp decline in several conflict countries (including Libya, Syria, and Yemen) over 2010–14.[22]

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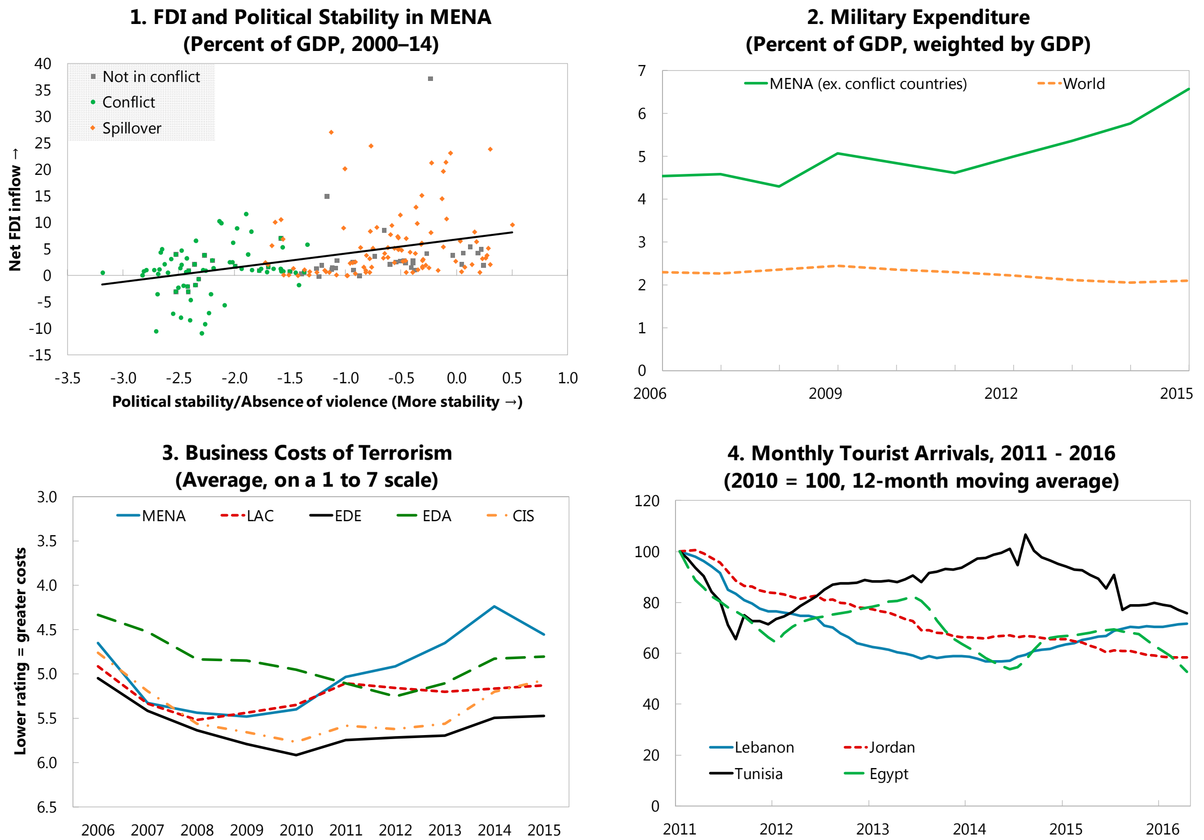
[19] Trust depends on a multitude of factors and is only partly linked to the spread of violence within the region. Loss of trust during conflict has been documented in the literature (Justino 2009). The genocide in Rwanda provides an extreme example of how trust can be destroyed within communities and affect economic recovery (see Newbury and Baldwin 2000 for the impact on women).

[20] Arab Countries in Transition include Egypt, Jordan, Libya, Morocco, Tunisia, and Yemen.

[21] The economic literature has established a strong link between institutions and income per capita through a series of papers, including Acemoglu, Johnson, and Robinson (2001); Knack and Keefer (1997); Johnson, McMillan, and Woodruff (2002); Besley, Fetzer and Mueller (2015); Acemoglu, Johnson, and Robinson (2005); and Easterly (2001).

[22] Libya's rank in the World Economic Forum's Global Competitiveness Index for the quality of its institutions

Figure 6. Measures of Political Stability and Private-Sector Confidence



Sources: Top Left: FDI: IMF World Economic Outlook; Political Stability: World Bank World Goverance Indicators; IMF staff calulations. Top Right: Stockholm International Peace Research Institute Military Expenditure database; IMF staff calculations. Bottom Left: Business costs of terrorism indicator from World Economic Forum Global Competitiveness Rankings 2015–2016; IMF staff calculations. Bottom Right: National authorities, Haver Analytics; IMF staff calculations.
Note: For chart 6.2, regional averages are weighted by GDP in USD. Conflict countries include Afghanistan, Iraq, Libya, Somalia, Sudan, and Yemen.

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dropped from 75th in 2007 to 142nd in 2014 (out of 144 countries). This is consistent with other governance indicators. For Yemen, over 2000–2014, the percentile rank on government effectiveness decreased from 22.0 to 7.2. In Syria, the same indicator plunged from 32.5 in 2010 to 6.7 in 2014, according to World Bank Governance Indicators.

POLICY CHALLENGES

A. Limiting the Immediate Impacts of Conflict and Refugee Crises

21. Policies can help address the impact of conflict, but are often difficult to implement. Even when violence is ongoing, policymakers need to ensure government continuity and manage fallout to minimize the harm to both public and economic activity. Three priorities stand out: (1) protecting economic and social institutions from becoming inoperative or corrupt, which weighs on post-conflict reconstruction; (2) prioritizing public spending to protect human life, limiting the rise in fiscal deficits, and, to the extent possible, helping to preserve economic growth potential; and (3) stabilizing macroeconomic and financial developments through effective monetary and exchange rate policies. The evidence in this section shows that effective economic policies, supported by advice from the IMF and others, have sometimes successfully mitigated the economic fallout from conflict. It also shows, however, that such policies have often proven difficult to implement in a climate of socio-political fragility, as policymakers have been caught between multiple and often competing objectives.

Challenge #1: Protecting the effectiveness of economic institutions

22. Protecting institutions has been difficult when political systems disintegrate. The experience with MENA conflicts underlines the importance of keeping core government institutions, such as fiscal agents and central banks, functioning and independent of corruptive interference. This is exceptionally difficult during conflict, however, as policymakers often become tempted to capture institutions critical for economic governance to increase control over political and economic activity. For example, fiscal spending and credit may be redirected to the constituencies of those in power, which may interfere with economic efficiency; regulations may be biased in favor of a privileged few at the expense of maintaining a level playing field; and the collection of revenue may be aimed at political foes rather than friends. Policymakers may also find it hard to avoid giving in to populist pressures even when this entails decisions on critical reform projects. In addition to becoming more partisan, policymakers faced with large-scale conflicts tend to become more myopic: the focus shifts to immediate economic survival, to the detriment of longer-term performance and maintaining confidence among economic agents in institutions such as central banks or in financial systems. The damage to economic governance has been particularly strong in cases where institutional quality was already poor prior to the outbreak of violence, as in Afghanistan, Iraq, Libya, Syria, and Yemen. More broadly, the conflicts in these countries have all been associated with critical economic institutions—central banks, ministries of finance, tax authorities, and commercial courts—becoming less effective as a result of challenges to their reach on parts of their countries' territories.

23. Moreover, policies taken in response to conflicts can have unanticipated effects. A prominent example involves the withdrawal of correspondent banking relationships, the practice in which international banks stop providing counterparty services to financial institutions. This has become more widespread in the MENA region, partially in response to attempts by ISIL and other non-state actors to capture payment systems, for example in Iraq and Somalia.[23] Because of this withdrawal, cross-border activities in several countries have declined sharply, especially remittance flows and trade. The potential economic consequences can be substantial for countries such as Lebanon and Jordan, where remittances account for more than 10 percent of GDP. More generally, economic agents responses to policy instruments tend to become more unpredictable during conflict because of unstable expectations: risk aversion may increase sharply, making private investment inelastic to fiscal or monetary policy changes; and tax compliance may fall abruptly, significantly undermining revenue collection and thus fiscal balances.

24. Examples of countries "holding things together" do exist nonetheless. Both Jordan and Lebanon strengthened their inter-ministerial cooperation, for example, as well as coordination with donors and UN agencies as they dealt with refugee-related pressures. Their efforts led to the Jordan Response Plan and the Lebanon Crisis Response Plan. The Palestinian Monetary Authority's business continuity planning is another encouraging example. Good institutional preparation has been instrumental in maintaining a workable payments system and a robust macroprudential framework in periods of elevated stress, such as the 2014 war in Gaza.[24] Finally, in Libya, a broad range of officials maintained active, albeit limited, dialogue outside the country with the IMF on public finances and exchange market pressures, which has helped maintain some degree of joint planning and macroeconomic stability.

Challenge #2: Prioritizing fiscal spending to protect human life and limit rising deficits

25. Conflicts are usually associated with greater fiscal pressures. In many countries suffering directly from conflicts, declining revenue collection, reduced external financing (including as a result of donor fatigue), and heightened spending pressures have caused fiscal positions to deteriorate. The magnitudes can be dramatic: in Yemen, preliminary data on the 2015 outturn suggest that central government revenue fell short of the pre-conflict forecast (prepared in the fall of 2014) by as much as 60 percent—reflecting the combined effect of the sharp fall in oil prices and the shutdown of oil production facilities in the wake of the escalation of the conflict, as well as a 60 percent drop in non-oil revenue relative to expectations following a major GDP contraction amid worsening security. Recent experience in West Bank and Gaza illustrates the potential for significant volatility in external support, with donor financing for the budget decreasing by one-third in 2015 in spite of continued expenditure needs amid a major upturn in violence.

26. In response, deficits in conflict countries ballooned even when expenditure declined. Fiscal balances in Iraq, Libya, Syria, and Yemen deteriorated significantly between the year before and the year after the onset of major violence (Figure 7, Sab and Hegazy 2014). At the same time,

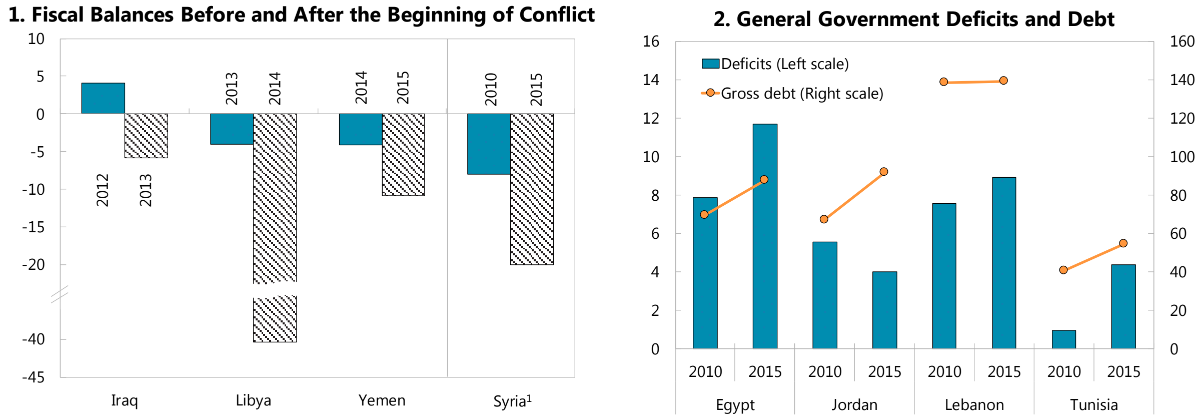
[23] In Iraq, the U.S. Federal Reserve System temporarily interrupted the supply of U.S. dollars to the country as a result of concerns about Anti-Money Laundering/Combating the Financing of Terrorism standards, which was only resolved after reforms were implemented.

[24] In anticipation of banking disruptions, the Palestine Monetary Authority filled ATMs, expanded ATM networks, and boosted mobile banking and the use of universal credit cards. Following the ceasefire, the authority granted a deferral in debt payments to all Gaza borrowers, temporarily cancelled commissions on loans, and used innovative bank capital reserves to ease the financial strain without affecting bank balance sheets.

covering the widened deficits represented a major challenge: in some cases, such as Iraq, new taxes (such as on cars, internet usage, and mobile phones) as well as tariff increases initially helped to close financing gaps. However, the fragility of economies leaves limited scope for new revenue measures. Consequently, absent strong donor support, countries had to balance their books by relying more on inflationary monetary financing combined with adjustment of expenditure, both in level and composition.

Figure 7. Fiscal Indicators in Selected Conflict and Spillover Countries

(Percent of Fiscal Year GDP)



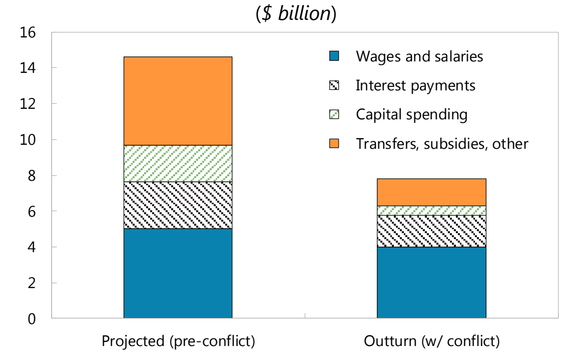
Sources: National authorities; IMF staff estimates[1]; and IMF staff calculations.

Note: In right chart, Jordan's 2015 deficit includes a transfer to the National Electric Power Company.

27. Experience has also shown that better expenditure prioritization was a challenge. In theory, the highest priority in conflicts should be given to protecting the most vulnerable to avoid an additional deterioration in living conditions that could fuel violence. Yet, the evidence from conflict countries suggests that this has rarely been a priority given major budget pressures. Lack of administrative capacity in a conflict offers partial explanation, but a desire to shore up the support of key political constituencies often also plays a role. Yemen illustrates the problem: fiscal execution was largely reduced in 2015 to paying public sector wages and servicing public debt. Given severe resource constraints, other expenditures, including social expenditure and transfers, as well as public investment, were sharply curtailed.

2015 Public Expenditure for Yemen

(*$ billion*)



Sources: National authorities; IMF staff calculations.

28. Some countries have tried to improve spending quality. Iraq has established an inter-ministerial committee, for example, to improve project selection and procurement practices based on objective criteria and thus reduce rampant corruption. The country is also making plans, with the help of the World Bank and others, to target public investment to geographical areas that have just been recovered from ISIL, intending to quickly improve public services, restore social cohesion, and lay the foundation for growth. In Afghanistan, authorities are seeking to increase spending efficiency by reducing the number of ghost workers in the public sector through electronic payments and by improving transparency and oversight in procurement.

29. Fiscal challenges have also mounted for spillover countries, albeit on a smaller scale. In countries hosting refugees, especially Jordan and Lebanon, the neighboring conflicts have raised fiscal pressure as revenue collection has declined and expenditures have increased on security and basic services such as housing, health, and education to accommodate refugee populations. However, the effect of the neighboring conflicts on revenue and spending patterns is difficult to isolate—most available studies put the annual direct cost of coping with these countries' refugee crises at about 1 percent of GDP, noting that the "true costs" may be a multiple of this number amid failure to account for a deterioration of service quality and potentially significant indirect effects.[25] Tunisia's central government expenditures also increased, as the authorities enacted urgent measures amounting to 0.7 percent of GDP to alleviate the short-term economic effect of terrorist attacks and to strengthen security (IMF 2015a). In Jordan and Tunisia, the IMF provided authorities with space to address these pressures by relaxing fiscal targets under their financing arrangements.

30. Across the region, countries have tried to maintain or strengthen fiscal buffers. The increasing spread and intensity of conflicts has cast a long shadow over the outlook for the entire region, affecting confidence even in distant places. Policymakers have no silver bullet to mitigate this adverse trend, but many countries have made it a priority to contain—and, if possible, reduce—fiscal deficits and public debt levels to provide space to react to conflict-induced shocks to economic activity, such as a sudden drop in tourism receipts. Indeed, with the exception of Egypt, fiscal deficits have been maintained in the single digits through 2015, and some countries even achieved a modest consolidation relative to the fiscal positions in 2010 (Figure 7). At the same time, public debt ratios remain elevated in many countries, calling for continuing efforts to strengthen buffers.

Challenge #3: Monetary and exchange rate policies to help maintain stability

31. Conflicts have pushed central banks into a greater fiscal role. Indeed, in many MENA conflict countries, two factors have caused central banks to assume an even more critical role in facilitating economic activity than in peacetime.

- **Stepped-up government financing.** In a more volatile and uncertain environment, as financing from abroad and from domestic financial markets dried up, central banks have been under pressure to loosen monetary policy in support of budgets and economic activity. In Yemen, for example, the joint impact of the loss of revenue due to falling oil prices and conflict caused a severe fiscal crisis that, in 2015, led the government, in essence, to finance part of its budget directly from the central bank.

- **A scaled-up role in revenue and expenditure management.** In a more polarized and insecure

[25] For Jordan, see USAID (2014); for Lebanon, see World Bank (2013).

environment, central banks have tended to take on very broad mandates. Libya's central bank has in practice become the fiscal agent responsible for operating government finances during the crisis, and has played a key role in negotiating the export contracts for oil and other commodities.

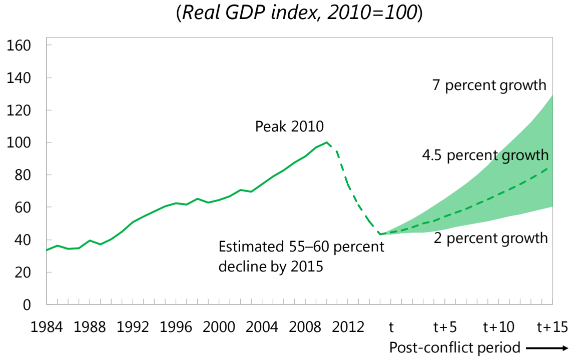
32. Financial pressures have led to greater reliance on nontraditional instruments. A greater central bank financing role has often interfered with monetary and exchange rate stability, especially where accommodative monetary policies were implemented amid inflationary pressures on goods and services caused by supply disruptions (see also Paragraph 7). In such cases, central bank international reserves often declined precipitously. In Libya, reserves dwindled from 41 months of imports in 2011 to 26 months in the spring of 2016. Similar developments have taken place in Yemen, where reserves, which were at almost 6 months of imports in 2014, have by now been almost depleted: since the start of 2016, the central bank has only provided foreign-exchange reserves for imports of rice and wheat, while continuing to service the government's external debt obligations through March 2016. Amid such pressures, policymakers often augmented their monetary policy toolkits through increased recourse to administrative measures in support of better controlling domestic credit allocation and foreign exchange flows. Iraq and Libya, for example, significantly tightened their frameworks for controlling foreign exchange markets.

B. Achieving Strong Post-Conflict Recovery

33. Once conflicts subside, the challenge shifts to managing the path back to normalcy. Policy priorities shift to consolidating peace, rebuilding institutions and infrastructure, and creating conditions for sustained economic recovery and growth (see IMF 2012). Western Europe after the World War II and Rwanda after the 1994 genocide provide two examples where the daunting task of durably exiting conflicts was achieved relatively quickly. In both cases, economic rebuilding was embedded in an effective process of political reconciliation that led to improved security, with the support of massive external financial assistance.

34. However, recovery has often been protracted. This holds true especially where long and intense spells of violence left deep marks on physical infrastructure, human and social capital, and economic institutions. Syria illustrates this point: even with a relatively high annual growth rate of 4.5 percent, it would take the country 20 years or more just to rebound to its 2010 pre-conflict GDP level. This rate corresponds to the average rate experienced by a broad range of post-conflict countries over 1970–2014 that maintained peace for at least 10 years after conflict had ended.

Estimated Recovery Path for Post-Conflict Syria
(*Real GDP index, 2010=100*)



Sources: Staff estimates; Center for Systemic Peace and national authorities.

35. Ongoing fragility is a chief reason for the often slow recovery. Conflicts do not end with the strike of a pen; instead, post-conflict countries typically remain for some time in a hybrid state where political and economic progress alternates with phases of temporary reversals and setbacks to the peace and rebuilding processes (Collier, Chauvet, and Hegre 2008; and IMF 2011, 2015b). This is consistent with the findings of several studies showing that elevated uncertainty and recurrent violence following a conflict delay investment and development (Herrala and Turk Ariss 2016; Bazzi and Blattman 2014). These dynamics have harmed recoveries in several countries in the MENA region, including Afghanistan, Iraq, Libya, Somalia, and Sudan. After initial successful recoveries, recurrent bouts of conflict forced policymakers, and economic agents more generally, to reassess the scope for rebuilding efforts and structural reforms.

36. Experience suggests several priorities for implementing reforms successfully.

- **Achieving sufficiently strong political buy-in.** Solidification of political buy-in requires economic policy strategies that: (1) avoid imposing concentrated losses from reforms; (2) use package deals bundling different reform projects to distribute costs and benefits more evenly; (3) pursue "quick wins" that produce visible, encouraging results early on; and (4) effectively address the issue of corruption to promote equity and shared responsibility. In addition, a compelling, and widely disseminated, narrative of the economic reform agenda can help policymakers in their outreach efforts (see Collier 2015).[26]

- **Strengthening economic institutions, including through capacity building assistance**. Institutional reform has been high on the agenda in MENA countries recovering from conflict. Post-conflict reforms of macroeconomic policies, for example in Sudan and Somalia, have often focused on improving fiscal practices, strengthening historically weak central bank independence, improving banking supervision, and rebuilding economic statistics. For example, in the area of monetary policy, a key challenge has often been to rebuild or strengthen operational capability and re-anchor long-term inflation expectations. Moreover, high levels of corruption call for efforts to improve governance (see IMF 2016d). In such environments, pay-offs from capacity building efforts are especially high and, if security conditions allow, have often triggered sizable multi-year technical assistance programs from the IMF and other partners. Close coordination between the authorities and external partners around a well-articulated technical assistance strategy can help maximize the effectiveness of such assistance.

- **Maintaining credible macroeconomic frameworks to manage sizable capital inflows.** Recovery from intense conflict typically requires massive public investment in infrastructure, as well as financial support to firms and vulnerable population segments to promote inclusive growth and address poverty.[27] At the same time, countries in the reconstruction phase are particularly susceptible to the risk of debt distress, entering the post-conflict era with already elevated debt levels that are bound to increase further since reconstruction aid typically takes the form of loans rather than grants. In addition, surges in capital inflows can trigger strong real

[26] For example, recent studies have explored how to use political economy analysis in state building (OECD 2010); establishing good governance (Grindle 2011; Levy 2011); and fostering development (Unsworth and Williams 2011).
[27] Some countries may actually face a drop in international financial assistance when their conflicts end; for example, where the resulting political compromise bestows power on individuals or groups not supported by the international community. To some extent, Sudan has faced such a situation since the secession of South Sudan in 2011.

exchange rate appreciation weighing on competitiveness, especially in the presence of supply bottlenecks (see Collier 2009; IMF 2012). Policymakers thus need to carefully monitor the path of public and external debt levels, as well as of the main macroeconomic aggregates more generally. In response to this need, the IMF has been assisting many country authorities in developing realistic macroeconomic frameworks and sustainable debt strategies. By taking multi-year horizons, these frameworks—complemented by debt sustainability analysis—guide policy decisions on sequencing of reforms and donor assistance.[28] Moreover, the frameworks have guided efforts to maintain or rebuild adequate fiscal and external buffers in support of sustainable fiscal and external account positions, avoid excessive exchange rate volatility, and prevent high-inflation dynamics.

- **Unwinding highly interventionist economic policies.** At the end of a conflict, countries tend to find themselves left with interventionist practices ill-suited to a more market-based, incentive-driven, and inclusive economy. There may be price controls for major groups of goods and services, dual exchange rate systems, directed credit that favors privileged firms while overlooking others, exchange and capital controls, and burdensome and selective administrative processes regarding how businesses operate. Efforts to phase out interventionist regulations thus often become a priority, which however calls for careful sequencing since these policy initiatives can have unintended, destabilizing consequences in the short run. For example, financial deregulation can increase the risk of financial instability (Rachdi, Hakimi, and Hamdi 2015), and trade liberalization can harm non-competitive industries.

37. Achieving peace may require bold decisions, including on fiscal decentralization. This is paramount in countries such as Iraq, Libya, and Syria, where conflicts have sharpened divergences in political and economic interests. In such cases, reducing the resulting centrifugal political forces—especially where political, religious, or ethnic divisions coincide with the geographical dispersion of the population—may call for fiscal decentralization in the form of effective and equitable agreements on revenue-sharing and expenditure allocation that provide significant fiscal autonomy to subnational regions, subject to certain conditions being met (see Ahmad and Mazarei 2015). Similarly, fiscal decentralization could be an option when central institutions are weak, as subnational governments may be best positioned to ensure the provision of services, since they are closer to local needs and may enjoy more legitimacy. Experience shows that the design of such institutional arrangements, which need to balance efficiency and distributional considerations, is complex and requires accounting for many factors, such as constitutional constraints and the capacity of subnational governments to spend well and raise their own revenues (see IMF 2010 for details).

C. Finding a Sustainable Solution to the Refugee Crisis

38. Resolving the current refugee crisis is a priority for MENA and external partners. Because refugees often have fewer rights than local populations and are often absorbed into already

[28] The macroeconomic frameworks provided by the IMF can be developed in the context of a financing arrangement, but also as a technical assistance engagement, as was the case in some European countries.

disadvantaged local communities, it risks creating a new underclass comprising refugees and the existing poor in the host country. Addressing the needs of refugees and the poor is therefore crucial on humanitarian grounds, as well as for the future political stability and economic growth of the countries in the region.

39. In principle, there is a case for refugees to return to their homes once conditions allow. Many refugees would likely choose to return home, where they would contribute to their country's growth potential and to a successful transition from war to peace. The home country will have a particular interest in attracting skilled workers who left during the conflict. This is consistent with evidence that returnees bring new skills, connections, and experience acquired abroad (IOM 2008; Dayton-Johnson and others 2009; UN 2006). But re-integrating refugees is challenging: issues may involve a lack of security and economic opportunities in resettlement areas, significant gender imbalances (as conflicts create many widows), and uncertainty over property rights. To minimize the harmful impact of such issues, initiatives to facilitate the return of refugees should ideally become part of a broader strategy for development and post-conflict reconstruction (Weiss Fagen 2011).

40. Experience suggests, however, that refugees tend to remain abroad for a long time. For example, Crawford and others (2015) show that protracted refugee situations have proliferated and represent the great majority of recent cases. Before the Syrian and South Sudanese refugee surges in 2011, almost half of the UNHCR-registered refugees had been in exile for more than 10 years. The protracted nature of conflicts, as well as the fragile early post-conflict environments, can partially explain this phenomenon. In addition, economic conditions may not be favorable to reintegrate returning displaced people: employment opportunities can be limited, and it can take several years before public infrastructure, requiring massive investment upgrades, becomes strong enough to adequately support living conditions.

41. Persistent refugee crises confront MENA host countries with difficult decisions. On top of providing adequate infrastructure and basic services, Jordan and Lebanon in particular will have to decide whether to grant refugees access to formal labor markets. This is a politically difficult call, as the countries already suffer from both high unemployment and underemployment that is fueled by strong population growth (see Box 1). These conditions stand in sharp contrast to the aging populations and labor shortages of some European countries, where labor market access (for a more limited number of refugees relative to the total population) will likely have a much stronger positive effect on economic growth (see IMF 2016b).

42. If politically feasible, labor market integration of refugees requires careful planning. Although integration of refugees may be the first and best option from an economic perspective, the specific circumstances of host countries determine the design and the pace of policy implementation. In particular, the needs of local populations, and poor labor market outcomes in particular, should be addressed at the same time as expanding access for refugees.[29] This makes this

[29] For example, as part of the Jordanian government's Vision 2025, the recently finalized Executive Development Program 2016–2018 includes a comprehensive employment and training strategy.

issue a much larger challenge than in the European context, for example.

- **Working rights.** Evidence suggests that integration works best if refugees are granted access to formal sector jobs, the right to establish businesses, and adequate mobility within countries and labor markets (Ruiz and Vargas-Silva 2013). If this were not possible due to political constraints, granting refugees working rights for special economic zones, where they would be employed alongside nationals, may be the next-best strategy as long as such zones are designed carefully, as recommended by Betts and Collier (2015) and being considered by the Jordan authorities.

- **Access to social programs.** Ensuring that refugee status does not halt human capital formation would improve the long-term well-being of refugees, both within their host countries and, if they return, in their home countries. This would require continued, and in many cases, improved access to vocational training, education, and health services.

- **Active labor market policies.** Studies have found that tools such as on-the-job training, temporary wage subsidies, and effective job intermediation can help refugees improve their skills and integration into local labor markets (Caliendo and Künn 2011; Clausen and others 2009).

- **Accompanying measures for nationals.** A comprehensive integration strategy should encompass measures to improve living conditions for nationals as well. For example, the replacement of in-kind aid with cash transfers could support local businesses. Similarly, external support could be used to improve basic services and public infrastructure for both refugees and nationals, especially vulnerable groups such as young people and women.

D. Supporting Inclusive Growth

43. Accelerated inclusive growth reforms are critical to preventing future conflicts. As Mazarei and Mirzoev (2015) and Ghanem (2015) show, many of the economic root causes that have fueled discontent and radicalization in the Arab uprisings of late 2010 and 2011 remain largely unaddressed in most countries across the MENA region—in spite of some early encouraging successes, especially in rolling back expensive and inefficient energy subsidies to make fiscal space for increased spending on education, health, and public infrastructure. Most importantly, labor market exclusion remains a critical issue: unemployment among women and the young remains among the highest in the world, and sizable income gaps persist between central and peripheral regions. Creating more economic opportunities for the many, in combination with more opportunities for political participation, will thus be crucial in strategies to improve living standards and reduce the likelihood of future conflicts across the MENA region.

44. Success will depend on strengthening the private sector as a key engine of job growth. Given large-scale inefficiencies in the public sector and limited budgetary space for a scaling-up of public employment, only private businesses can generate a sufficient number of productive jobs to overcome the employment challenge affecting MENA. At the 2014 high-level conference in

Amman,[30] policymakers and civil society organizations from across the region identified four priority areas for reform:

- **Governance and transparency.** Greater effort to combat corruption and ensure access to services and equal opportunities is needed to promote accountability and equity and provide a credible signal to skeptical populations of a turnaround in government commitment to more competitive and inclusive economic models. An important dimension in this area is to provide greater voice and freedom to citizens and improve political accountability.

- **Fiscal policies for jobs, growth, and fairness.** The composition of fiscal spending needs to shift toward growth-enhancing activities; and civil service reform could reduce the cost of public employment. On the revenue side, reforms should focus on making revenue collection fairer, including through broadening the tax base, making tax systems more progressive, and strengthening the efficiency of collection efforts, especially tax and customs (IMF 2015c).

- **Business climate reforms and access to finance.** Reforms need to reduce the cost of doing business, remove barriers to formality, and better integrate goods and services markets. Moreover, broadening access to finance, especially for small- and medium-sized firms, requires development of domestic financial markets and well-capitalized banking systems.

- **Labor market policies**. Reforms should aim to remove distortions that discourage hiring and skills-building, while ensuring adequate insurance against unemployment risk and providing incentives for firms to abide by regulations. Moreover, recruitment and compensation policies that favor public sector employment should be reviewed, while active labor market policies—especially for the vulnerable—should be considered to facilitate the matching of workers to jobs and to build employability. Finally, education curricula should be refocused on the skills necessary for productive private sector employment.

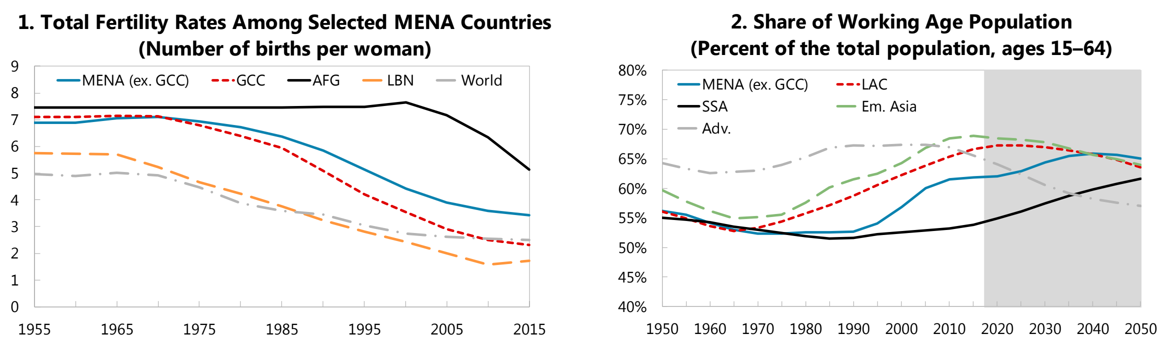
[30] See program and a stock-taking by IMF Managing Director Christine Lagarde.

Box 1. Challenges and Opportunities from Changing Demographics in the MENA Region

MENA has a young and growing population. Sixty percent of the population is under 30, making it the world's second-youngest region after sub-Saharan Africa. This large cohort of young people is beginning to mature, placing the region in a critical demographic window that could bring faster economic growth, but also lead to greater frustration and unrest. In the next five years, the working-age population of MENA (excluding the Gulf Cooperation Council [GCC] countries) is expected to increase by nearly 40 million, or by about 10 percent, according to central estimates from the United Nations' Population Division.

Many MENA countries have started to transition from high to low mortality and fertility rates. Increasing urbanization, better women's education, and delayed marriage, as well as social policies, have translated into lower fertility rates, which will, in time, lead to a decrease in the population growth rate. However, large differences exist across countries. The GCC countries (excluding Saudi Arabia) and Lebanon experienced earlier declines in fertility and have older populations. Afghanistan, Iraq, and Yemen are only just experiencing a decline in their fertility rates and will continue to have some of the world's youngest and fastest growing populations for the next few decades. In some cases—such as Algeria, Morocco, Tunisia, and most notably Egypt—fertility rates seem to have stabilized significantly above the global average steadily declining for many years.

Figure 1.1 Demographic Pressures in MENA



Sources: United Nations Population Division; IMF staff calculations.
Note: Population projections are from the UN's medium variant. Afghanistan and Lebanon in the fertility rate chart represent the countries in MENA with the highest and lowest fertility rates, respectively. Adv. = Advanced, Em. Asia = Emerging Asia.

This demographic transition is a challenge for policymakers. The rapid increase in the working-age population is placing significant pressures on the labor market, as the growth in job opportunities is not keeping up with the new entrants into the workforce. Indeed, labor markets are already strained in the region. The share of people aged 15–29 not in education, employment, or training were about 30 percent in Egypt and Jordan in 2012, and 48 percent in Yemen in 2010, according to the International Labour Organization. In addition, the region has a large untapped pool of young, highly educated women. While women make up nearly half the university enrollment in Egypt and Morocco, more than half in Jordan, Lebanon, and West Bank and Gaza, and nearly 60 percent in some GCC countries (UNESCO), female labor force participation rates are the lowest in the world. Large refugee populations may further increase pressures.

Appropriate policies can mitigate these risks. Some scholars have argued that demographic pressures from growing young populations heighten the risk of civil unrest (Cincotta 2004). But, accompanied by appropriate policies, the increase in the working-age population can lead to a "demographic dividend" of higher savings, greater investment, and, eventually, faster economic growth. Relying on labor-intensive manufacturing with flexible labor markets and an emphasis on training and education, China and Korea, in particular, successfully turned this challenge into an opportunity (IMF 2015d).

THE ROLE OF EXTERNAL FINANCIAL SUPPORT

45. The scale of the refugee crisis has put pressure on the current humanitarian aid model. Several UN institutions, especially the UNHCR and the World Food Program, have been playing a leading role in the provision of humanitarian assistance, both to internally displaced people and refugees. Governments of the host countries, along with other multilateral and bilateral donors, including civil society organizations, have also supported these efforts. At the same time, funding has not kept up with the sharp increase in needs. For example, the World Food Program and the UNHCR have had to cut their services to refugees in Jordan due to funding constraints, which may have contributed to the acceleration of refugee flows to Europe from late 2014. A lack of secure access to areas, especially conflict zones (such as in Iraq and Syria), has often impeded humanitarian aid delivery, and support failed to reach the most needy as a result.[31]

46. Moreover, integrating developmental and humanitarian assistance has become crucial. Given the protracted nature of the current MENA conflicts and associated refugee crisis, recognition is growing among external partners that the massive needs require more than limited focus on the short-term humanitarian needs of particularly vulnerable groups such as the refugee populations in Jordan and Lebanon. For example, as discussed in Section II, the need to prevent poverty rates from increasing in host communities is often large, and providing more economic opportunities for the fast-growing populations of the region requires sizable investment in public infrastructure. In addition, once conditions allow, the costs of rebuilding the economies of countries such as Iraq, Libya, Syria, and Yemen will by far exceed their capacity to mobilize resources, especially given the limited scope for domestic revenue mobilization and often high debt. Together, these challenges create sizable financing needs over long periods that, experience suggests, are difficult to meet by sustained donor engagement: post-conflict countries tend to initially attract large aid to finance infrastructure investment and social expenditure, but these flows typically dissipate after a few years (Collier 2009; Elbadawi and Kaltani, and Schmidt-Hebbel 2006). Moreover, from a global perspective, the rapid increase in the number of refugees in recent years has posed an important challenge for humanitarian aid agencies, which have been reporting often significant funding gaps.[32]

47. The large-scale financing needs have recently triggered new fund-raising initiatives. These initiatives to help countries suffering from MENA conflicts and their spillovers complement existing support, including from the IMF, which has been maintaining financing arrangements with many countries in the region.[33] Most prominently, the February 2016 London Conference in Support

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[31] Convoys delivering humanitarian aid in Syria have repeatedly been blocked from accessing areas that suffered from widespread malnutrition (as media reports have suggested, for example, Human rights watch, BBC news).

[32] The current UNHCR High Commissioner, and his predecessor, point to the funding gaps that humanitarian agencies face, illustrated by cuts in transfers to refugees. For example, the World Food Program has announced dramatic reductions—of about 40 percent, 50 percent, and, in one situation, Mauritania, 100 percent—of the food support given to both refugees and other vulnerable communities in different parts of the world (see UNHCR speeches).

[33] Conflict countries in the MENA region have received IMF financing in the form of emergency assistance. Where

of Syria and the Region has resulted in substantial commitments to address the needs of refugees and their host countries. The World Bank, partnering with the Islamic Development Bank and the United Nations, has also established a Concessional Financing Facility for Jordan and Lebanon, as well as a guaranteed facility to enable multilateral development banks to lend to all MENA countries beyond what would be possible on the strength of their balance sheets alone. In addition, the GCC countries and regional institutions, which have already provided the largest share of official support to the Arab Countries in Transition since 2011, have signaled their willingness to engage significantly.[34] Private financing, which would be highly desirable, especially as FDI, to facilitate market access and knowledge transfer, may also play some role, but will likely be hampered initially by weak human and physical capital, as well as by low confidence.[35]

48. High debt levels call for support, especially as grants or concessional loans. Some MENA countries affected by conflicts and their spillovers already carry public debt burdens of 90 percent of GDP or more, roughly twice the emerging and developing country average. Such numbers leave little scope for accumulation of significant additional debt without major risk to the sustainability of countries' debt positions, especially if the financing were contracted on market terms. The IMF has highlighted this point in its engagement with other external partners aimed at mobilizing additional resources for the region. The greatest share possible of additional financing should be made available as grants or highly concessional loans to help ensure the viability of macroeconomic outlooks, especially where the growth-impact of the associated spending, and thus its impact on the country's capacity to service its debt in the future, remains highly uncertain. In extreme cases, those with very high debt burdens, restructuring of existing obligations may be the only realistic way to achieve sustainability.

49. Donor support is most effective when regionally well-coordinated. By engaging a large pool of donors, regional cooperation can help mobilize financial support on a scale consistent with the MENA region's vast resource needs for reconstruction and development. Moreover, it can prioritize engagement across recipient countries with competing demands and differences in absorptive capacity (or at least facilitate the sharing of updates on respective intentions with regard to assistance volumes and timing of disbursements). Finally, regional initiatives offer economies of scale in addressing policy issues spanning multiple countries, such as in the area of trade integration or economic governance. One recent encouraging example of the latter is the Deauville Partnership's Compact on Economic Governance, signed by all the Arab Countries in Transition in

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institutional capacity has allowed, for example in Afghanistan and Iraq, upper-credit tranche arrangements supported the countries' nationally owned economic adjustment programs. The IMF has also provided resources to neighboring countries suffering the effects of the conflicts. In Jordan and Tunisia, for example, the IMF has disbursed more than $3.7 billion since 2012. In all these cases, IMF financing has typically represented an important share of total official financing envelopes and has catalyzed engagement by other donors.

[34] IMF staff estimates that the GCC countries and regional institutions have provided about $53 billion out of a total $100 billion of external official financing to the Arab Countries in Transition over 2011–15.

[35] This said, some encouraging initiatives are already under way. For example, the Jordanian government intends to set up special economic zones with support from foreign investors aimed at creating employment opportunities for both Jordanians and Syrian refugees (see Jordan Ministry of Planning and International Cooperation 2016).

May 2015, which is an effective framework to promote key policy objectives in support of good governance and sound business climates.

50. Frameworks for aid coordination have also proven critical for each recipient country.[36] Effective prioritization and sequencing of investment projects, reform efforts, and capacity building assistance among multiple implementation agencies and respective recipient governments have been shown to be helpful in addressing institutional and macroeconomic absorption constraints, as well as in avoiding duplication of programs. In addition, as highlighted before, successful rebuilding of devastated economies and achieving inclusive growth hinge on country authorities and their external partners to converge around a credible macroeconomic framework. This must define a sustainable path for fiscal and external deficits and debt levels to anchor both policymaking and donor engagement.

[36] Aid coordination has long been identified as crucial in improving aid effectiveness (UNDP 2002; Bourguignon and Leipziger 2006), and experience shows (IEG 2013 for Afghanistan; OED 1999 for West Bank and Gaza) that coordination has to occur not only among donors, but also with all other stakeholders (such as government and nongovernment organizations). The Marrakech Action Plan, which emerged from the 2004 Managing for Development Results roundtable, is a concrete example of donors, recipients, and international agencies working closely to identify, finance, and implement systems and the capacity needed to better manage and foster development (Bourguignon and Leipziger 2006).

Annex 1: Empirical Analysis Methodology

A quantitative study can estimate the overall magnitude of the impact of conflicts on key macroeconomic aggregates, specifically economic growth and inflation. Estimating the relationship between growth and conflict is complicated by endogeneity, omitted variable, and measurement problems, which are typically tackled with instrumental variables (Miguel, Satyanath, and Sergenti 2004; Ciccone 2008; Besley and Persson 2009; Bazzi and Blattman 2014) and synthetic control methods (Abadie and Gardeazabal 2003; Bove, Elia, and Smith 2014).[37]

Several estimation strategies have been used to quantify the impact of conflicts on economic growth. The most common relies on cross-country growth regressions (Barro 1998) with robustness checks (Levine and Renelt 1992), where the dependent variable is GDP and the independent variables include conflict. As observed in Sandler and Enders (2008), panel techniques allow the study of a wide variety of countries presenting a larger variation in growth, but provide an "average" picture that may not be relevant to many countries in the sample and may be inadequate for revealing the dynamic effect of conflict. Time-series methods, on the other hand, trace the dynamic response of growth to specific conflicts, but can only be applied to countries with sufficiently long data series (see Abadie and Gardeazabal 2003; Blomberg, Hess, and Orphanides 2004).

Using the dataset on Major Episodes of Political Violence from the Center for Systemic Peace,[38] this paper presents estimates based on a panel and a panel vector autoregression approach. The panel estimation quantifies the average cost of conflicts on annual real growth for 179 countries worldwide, including 16 MENA countries.[39] In the panel, the dependent variable is growth and independent variables include global driving factors (in particular, world growth as a proxy for global demand and the change in oil prices), and proxies for conflict intensity and conflict spillover.[40] In line with Blomberg, Hess, and Orphanides (2004), we use time and country fixed effects to control for different average growth rates across countries and for time-specific shocks.[41]

On average, we find that a conflict decreases real growth by 1.5–2.3 percent for the entire sample

[37] The estimation results can be influenced by measurement error and omitted variable bias. A causal interpretation may not apply.

[38] The database covers episodes featuring systematic and sustained lethal violence by organized groups that result in at least 500 directly related deaths during the episode. Each episode is scored for magnitude of societal-systemic impact on an eleven-point scale (0–10), comparable across categories of episodes (for example, international violence, international war, international independence war, civil violence, civil war, ethnic violence, and ethnic war) and across cases (See the Center for Systemic Peace website for more details).

[39] These countries are Algeria, Egypt, Iran, Jordan, Kuwait, Lebanon, Libya, Oman, Pakistan, Qatar, Saudi Arabia, Sudan, Syria, Tunisia, and the United Arab Emirates.

[40] The conflict intensity variable is defined as the sum of the magnitude scores assigned to each of the conflict categories listed in footnote 39. In the sample, the conflict intensity variable ranges from 0 to 18. The conflict spillover variable is a dummy equal to 1, when the sum of the intensity of conflicts in neighboring countries is greater than 10, and otherwise 0.

[41] Since world growth and oil prices capture the effects of global common factors, they turn out to be insignificant when time-fixed effects are included (Table 1, top panel, columns 2–3).

and by 1.3–1.7 percent for countries in MENA.[42] The intensity of domestic conflicts is negatively and significantly associated to real GDP growth (Table 1, top panel), both across the entire sample (columns 1–3) and in the sample of MENA countries (columns 4–5). As in Tavares (2004), we find that lagged growth is positively and significantly related to current GDP growth (columns 3 and 5).[43] Conflicts in neighboring countries significantly decrease domestic growth by 1.0–1.7 percent overall, and by 1.7–2.0 percent in the MENA region. As indicated by the low R-squared though, the variables under analysis explain a small fraction of the variation of growth at the country level. Similar results are found when looking at the link between conflicts and inflation. Table 1 (lower panel) shows that, in years of intense violence, countries tend to experience higher inflation. Moreover, consistent with the comparable findings for growth, conflicts also tend to push prices upwards in neighboring countries.

The size of these effects increases with the intensity of the conflicts. Using the average conflict intensity coefficients (Table 1), we compute that severe conflicts decrease GDP by 8.4 percentage points, on average, in all countries and by 5.2 percentage points in the MENA region. Inflation increases by 5.9 and 8.1 percentage points, respectively. Less severe conflicts decrease GDP by 1.2 percentage points on average for the entire sample (0.7 for MENA countries), while pushing up inflation by 0.8 percentage point (1.1 in the MENA region).[44] These estimates do not account for non-linearity in the impact of conflicts.

The unbalanced panel vector auto-regression with exogenous variables,[45] including the same variables described in Table 1, provides a cross-check of the panel results and is used to estimate the dynamic response of growth to different conflict shocks (see Acevedo 2014). The Impulse Response Functions in Figure 8 trace the effect on baseline GDP of a one-off conflict shock with everything else kept constant for three groups of countries (16 MENA countries, 25 low-income countries, and 37 emerging market economies) for which longer time series are available. The shock has a large, negative impact on the MENA countries, where GDP contracts by as much as 4 percent, followed by low-income countries with a decline of about 2 percent, and by emerging market

[42] To estimate the impact of conflict on growth, we multiply the coefficient on conflict intensity by the sample mean conditional on conflict, which gives an idea of the average loss experienced by countries that go into conflict. For example, since the sample mean for countries in the MENA is 4.2, the effect on GDP of a conflict in the MENA is in the range of -0.401*4.2 =1.7 and -0.320*4.2 = 1.3.

[43] The use of the lagged dependent variable among the explanatory variables introduces contemporaneous correlation with the error term rendering OLS estimates of the parameters of interest biased and inconsistent. A possible solution is the use of dynamic panel estimators à la Arellano-Bond. The estimation of the model with system GMM does not solve the problem in this particular case though, because lags of variables in the model are weak instruments of the endogenous regressors. For this reason, Table 1 only presents OLS estimates.

[44] Severe conflicts are defined as conflicts with intensity greater than 10 and less severe conflicts as having an intensity between 1 and 3.

[45] The panel vector auto-regression with exogenous variables, which includes fixed effects and is estimated using two lags, treats global factors and proxies for conflict and conflict spillover as exogenous variables. As in Acevedo (2014), the model is estimated with bootstrap procedures to correct for the bias in the LSDV estimator (Pesaran and Zhao 1999; Everaert and Pozzi 2007). The Impulse Response Functions presented in Figure 8 are generalized Impulse Response Functions, as in Pesaran and Shin (1998).

economies where the contraction is more limited. However, the impact lasts longer on low-income countries, where GDP remains significantly below its no-conflict initial baseline throughout the medium term. On the other hand, in both MENA and emerging market samples, the effect of a temporary conflict dissipates after a couple of years. But since conflict and violence often come in lengthy spells, and cause different levels of intensity and destruction of human and physical capital, economic activity can be more severely affected than what is indicated in our results, and could remain below its pre-conflict baseline over the medium term, even in MENA countries. As for the longer term, the impact of conflicts on economic performance is notoriously difficult to gauge both through theory and empirical evidence (Blattman and Miguel 2010). Interestingly, the analysis of the Impulse Response Functions also confirms that a spillover shock would decrease GDP by 4 percent on impact in MENA (no significant effect is found for other country groupings).

The cross-sectional estimates presented here rely on large samples that include wide-ranging income and conflict experiences. However, the effect of conflict on economic activity depends on many country-specific factors, including the type, intensity, and duration of the conflicts, and the credibility of the peace. For example, for a given length and intensity of the conflict, recovering pre-conflict GDP levels (on a per-capita basis) may take longer if the most productive and more skilled segments of the population are disproportionately affected by conflict. Similarly, flight capital would only return once the end of the conflict is considered to be credible.

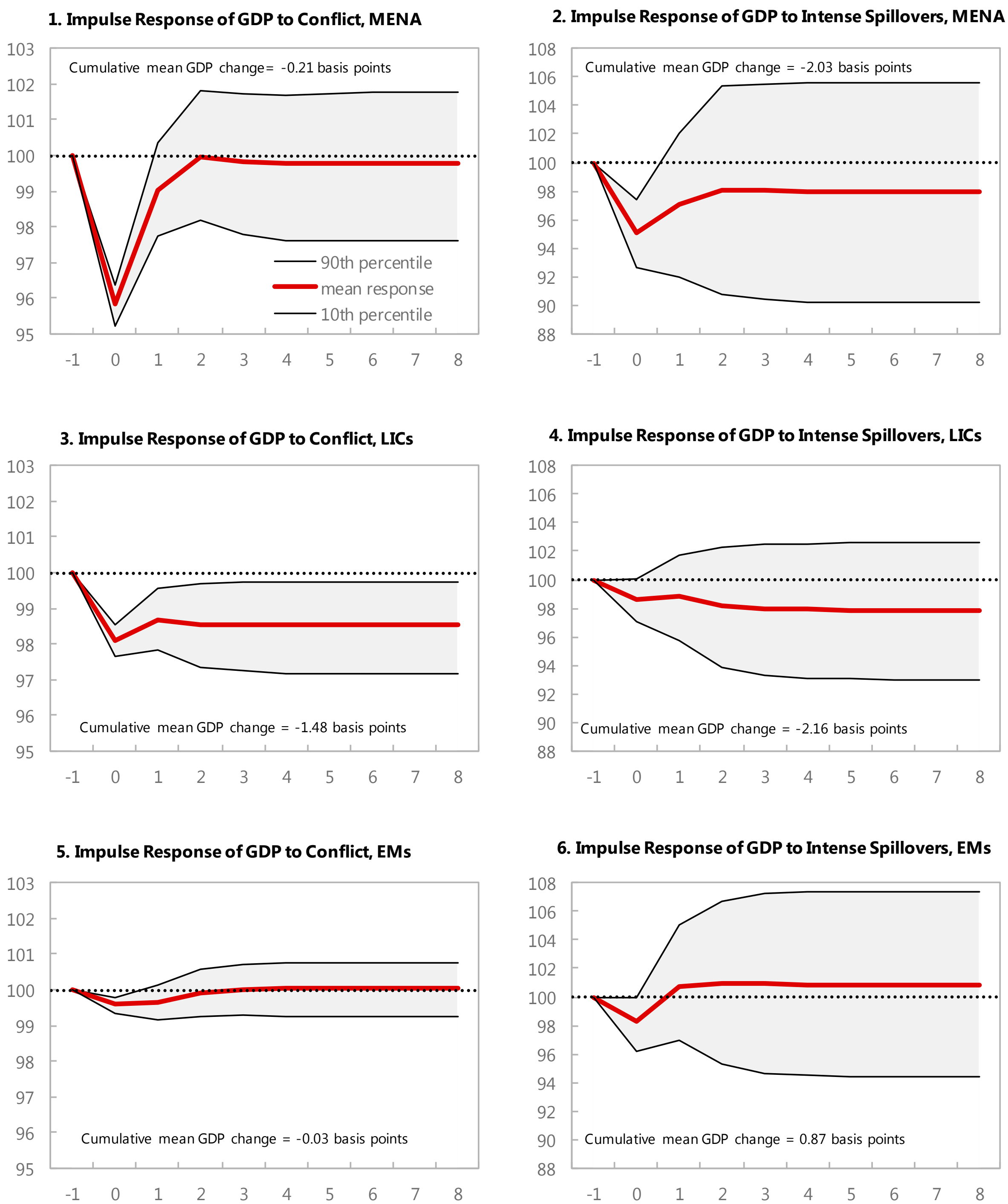
Although a direct comparison of the size of our results with those in the literature is hindered by different definitions and measures of conflict in use, our finding of a negative and statistically significant impact of conflict on growth mirrors those of Collier 1999; Blomberg, Hess, and Orphanides 2004; Tavares 2004; Abadie and Gardeazabal 2003; Eckstein and Tsiddon 2004; Enders and Sandler 2012; and Bove, Elia, and Smith 2014.

The interpretation of the regression results though, here as elsewhere, is potentially complicated by the econometric problems discussed above. While the quest for good instruments is particularly daunting in a study analyzing many different countries at once, spillover shocks from conflicts originating in neighboring countries can be more confidently interpreted as exogenous. The negative and statistically significant coefficient on the spillover shocks, which is in line with earlier findings (for example, De Groot 2010 and Murdoch and Sandler 2002, 2004),[46] is interesting in itself, and lends more credence to the postulated causality direction from conflicts to lower growth.

[46] These authors talk of the "phoenix effect"; for instance, the rapid recovery of the economy following a conflict as predicted by neoclassical growth models (Solow 1956; Barro 1991).

Figure 8. Impulse Response of GDP to Conflict and Spillovers

(Initial GDP = 100)



Sources: Center for Systemic Peace, IMF World Economic Outlook; and IMF staff estimates.
Note: The sample period is 1970–2014.

Table 1. Estimated Impact of Conflicts and GDP and Inflation

Estimated Impact of Conflicts on GDP

Model	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**
Sample	All	All	All	MENA	MENA
Country Fixed Effects	YES	YES	YES	YES	YES
Time Fixed Effects	NO	YES	YES	NO	NO
World growth (%)	0.782***	2.182	0.913	0.582	0.564
	(0.0667)	(2.328)	(2.71)	(0.361)	(0.367)
Oil price change (%)	0.00623***	0.0485	0.0382	0.0122	0.0146
	(0.00168)	(0.052)	(0.0631)	(0.00868)	(0.00855)
Conflict intensity	-0.666***	-0.631***	-0.449***	-0.401**	-0.320*
	(0.128)	(0.13)	(0.0996)	(0.15)	(0.157)
Large spillover dummy[1]	-1.725***	-1.542***	-1.096***	-2.159*	-1.723*
	(0.562)	(0.557)	(0.386)	(1.052)	(0.813)
Lagged real GDP growth (%)			0.290***		0.179***
			(-0.026)		(-0.010)
Constant	7.696***	3.715	4.095	2.156**	1.465
	(0.41)	(6.167)	(7.10)	(0.941)	(0.919)
Observations	6,273	6,273	6,214	706	699
R-squared	0.153	0.166	0.237	0.06	0.089

Estimated Impact of Conflicts on Inflation

Model	**(1)**	**(2)**	**(3)**	**(4)**	**(5)**
Sample	All	All	All	MENA	MENA
Country Fixed Effects	YES	YES	YES	YES	YES
Time Fixed Effects	NO	YES	YES	NO	NO
Oil price change (%)	0.0190***	0.0634***	0.0575**	0.0203***	0.0204***
	(0.00236)	(0.0239)	(0.0226)	(0.00638)	(0.00571)
Conflict intensity	0.623***	0.313**	0.294**	0.689**	0.432*
	(0.161)	(0.156)	(0.146)	(0.263)	(0.204)
Large spillover dummy[1]	2.282**	1.371	1.357	3.477*	2.064*
	(0.919)	(0.919)	(0.859)	(1.684)	(1.119)
Lagged inflation rate (%)			0.0823**		0.450***
			(0.0333)		(0.0714)
Constant	7.444***	7.340***	7.028***	7.871***	4.088***
	(0.483)	(0.538)	(0.537)	(0.344)	(0.587)
Observations	5,724	5,724	5,681	690	686
R-squared	0.257	0.394	0.444	0.314	0.540

Note: In parentheses, standard errors robust to heteroscedasticity and within-country clustering.
*** p < 0.01, ** p < 0.05, * p < 0.1
[1] Dummy =1 if total intensity of conflicts in bordering countries is greater than 10.

Sources: Center for Systemic Peace, IMF World Economic Outlook; and IMF staff calculations.
Note: The sample period is 1970–2014.

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